DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-019195
Date Inspected: 12-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	Shi Lei			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BE/12CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE12C-001, Bottom Plate transverse splice. The welder is identified as #044515 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SP3019-001-046, Side Plate WT stiffener web splice. The welder is identified as #040270 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 12BE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3002-005, Side Plate to Edge Plate hold back weld. The welder is identified as #040367 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB.

Segment 12CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3004-001, Side Plate to Edge Plate hold back weld. The welder is identified as #040367 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB.

Segment 12BW/12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated BP3023-001-037, Bottom Plate WT stiffener web splice. The welder is identified as #040611 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW12A-001, Deck Plate transverse splice. The welder is identified as #053486 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-223(2)1T-ESAB.

Segment 12BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated BP3022-001-029, 030, Bottom Plate WT stiffener hold back weld. The welder is identified as #040736 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB.

Segment 12CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated BP3025-001-024, 025, Bottom Plate WT stiffener hold back weld. The welder is identified as #040736 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB.

Segment 12AW

This QA Inspector observed Base Metal Repair using the Shielded Metal Arc Welding (SMAW) process at locations of removed fit up plates along the exterior of the Bottom Plate at the FL3 Bottom Panel location between panel points 110-112. The welder is identified as #202316 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for

CWR2134.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang, Shi Lei and Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 12AW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the FL3 Bottom Panel at locations of removed fit up plates.

Segment 12BE/12CE

This QA Inspector observed the removal of fit up plates by arc gouging from the Side Plate transverse CJP splice, cross beam side.

This QA Inspector observed back gouging of the root pass on the cross beam side Edge Plate and Side Plate transverse CJP splice.

Segment 12AW/BW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Edge Plate transverse CJP splice, including locations of removed fit up plates, cross beam side.

Segment 12BE/12CE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Edge Plate transverse CJP splice, including locations of removed fit up plates, cross beam side.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer